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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,910	12/31/2001	Gyu-chan Jun	1293.1300	6060

21171 7590 09/23/2003

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ART UNIT	PAPER NUMBER
2652	7

DATE MAILED: 09/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/029,910	Applicant(s) JUN ET AL.	
	Examiner William J. Klimowicz	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 August 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 4-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 11, 12, 15-17, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 7, 11, 15 and 23, the recitation of "the transparent window has a width of at least W corresponding to the following relationship:

$$W=(2t-NA)/n$$

where t is a distance from an outer surface of the transparent window to the disk, NA is a numerical aperture of the lens of the pickup which emits the external light and n is a refractive index of the transparent window" is indefinite, in light of the fact that the claims are drawn ***exclusively*** to a disk cartridge and/or window. The formulaic ranges recited in claims 7, 11, 15 and 23, however, are required to include positively recited structure such as an optical pickup lens, which is exclusive to the limitations found in claims 7, 11, 15 and 23.

Moreover, the structure and/or material and/or composition of the transparent window is thus dependent upon non-positively set forth variable structure (e.g., the optical lens which has a prescribed numerical aperture NA), thus the requirements of the window are dependent upon

structure which is not positively set forth in the claims, thus rendering the metes and bounds of the claim unascertainable.

In order to obviate the rejection, the offending claims should recite a combination of a disk cartridge and a lens and pickup (e.g., "A disk cartridge and pickup assembly combination, comprising."

Claims 12, 16, 17 and 24 are also rejected under this statute due to their dependency upon the aforementioned rejected claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2 and 4-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagiwara (JP 1-315085 A).

As per claim 1 and 13, Hagiwara (JP 1-315085 A) discloses a disk cartridge (1) comprising: a case (1a, 1b) for containing a disk (D); and a transparent window (4) installed to the case so as to allow an external light to access the disk (D) in the case (1a, 1b).

As per claim 2, wherein the transparent window (4) is installed such that an outer surface of the transparent window (4) is inwardly depressed relative to a surface of the case (1a, 1b) (e.g., see FIG 2).

As per claim 4 and also claims 10, 14 and 21, wherein the transparent window (4) is formed of at least one of a glass and acryl (acrylic material – see abstract of Hagiwara (JP 1-315085 A)).

As per claim 5, wherein the transparent window is installed such that an outer surface of the transparent window is level with a surface of the case (1a, 1b). For example, see FIG. 4, wherein the window (4) is level with case surface (3).

As per claims 6 and also claims 12 and 24, further comprising a shutter (5) which selectively opens and closes to reveal the transparent window (4).

As per claim 18 and also claim 22, wherein the transparent window (4) is expressly installed to the case so as to prevent an inflow of a foreign matter into the case (1a, 1b) – see abstract of Hagiwara (JP 1-315085 A).

Additionally, as per claim 19, the disk cartridge case (1a, 1b) includes upper and lower surfaces; and the transparent window (4) has top and bottom surfaces, wherein the transparent window (4) is installed to the case so as to allow the external light to access the disk (D) in the case (1a, 1b) through the top and bottom surfaces of the transparent window (4).

As per claim 20 and also claim 16, wherein the transparent window (4) has a height such that the outer surface of the transparent window is one of inwardly depressed relative to and at level with a surface of the case (see FIGS. 2 and/or 4, as discussed with regard to claims 2 and 5).

With regard to claims 1, 10, 13 and 21 assuming that the transparent window (4) of Hagiwara (JP 1-315085 A) is unattachable to and undetachable from the case (1a, 1b), Official notice is taken that making transparent members or windows which allow light to be

transmissive therethrough, as being "attachable" and "detachable" relative to their support, is a concept that is notoriously old and well known in the art. Examples include, *inter alia*, replacement windows for motor vehicles, eyewear, homes, etc. Moreover, the Examiner notes that an English-translated copy of a previously cited document (JP 62-267985) discloses a disk cartridge having an attachable and detachable window.

Given the teachings of Hagiwara (JP 1-315085 A) as applying a light transmissive window to a head access opening of a disk cartridge to prevent infiltration of dust/debris into the cartridge, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the window (4) of Hagiwara (JP 1-315085 A) as being "attachable" and "detachable" as is ***conventionally*** done with light transmissive windows (***even within the disk cartridge art***).

The rationale is as follows: one of ordinary skill in the art would have been motivated to make the window (4) of Hagiwara (JP 1-315085 A) as being "attachable" and "detachable" as is conventionally done with light transmissive windows in order to replace a damaged, scratched, broken window (4) of Hagiwara (JP 1-315085 A) without having to completely throw away the entire disk cartridge, including any valuable information stored on the disc residing therein. Such concepts of replacement windows are ***well known, established and appreciated in the art.***

Although Hagiwara (JP 1-315085 A) remains silent as to the specific relationships set forth in claims 7, 11, 15 and 23 or a prescribed dimension as set forth in claims 8, 9 and 17, it is noted that, given the teachings of providing a transparent window within an access window of a disk cartridge such that light for recording/reproducing by an optical pickup lens having a predetermined numerical aperture, is transmissive thereto, it would have been obvious to a

person having ordinary skill in the art at the time the invention was made to have had the transparent window of Hagiwara (JP 1-315085 A) so as to interact with recording lens of an optical pickup, to arrive at a width of window within the range set by the formulaic relationship prescribed in the claims.

The rationale is as follows: one of ordinary skill in the art would have been motivated to have had the transparent window of Hagiwara (JP 1-315085 A) provided so as to interact with recording lens of an optical pickup, to arrive at a width of window within the range set by the formulaic relationship prescribed in the claims in order to include a window which allows sufficient light to interact with the disk within the cartridge, while minimizing its size such that potential damage or unnecessary window material is thus reduced. No new or unobvious result is seen to be obtained by providing a range or size of window width for the disk cartridge of Hagiwara (JP 1-315085 A), given the teachings of Hagiwara (JP 1-315085 A) taken as a whole and the general knowledge available to one having ordinary skill in the art. To arrive at a particular sized window width would have been within the realm of routine optimization /experimentation to thus establish a window width size which performs with a prescribed optical lens.

Moreover, absent a showing of criticality (i.e., unobvious or unexpected results), the relationships set forth in claims 7-9, 11, 15, 17 and 23, given the disclosure of Hagiwara (JP 1-315085 A), are considered to be within the level of ordinary skill in the art.

Additionally, the law is replete with cases in which when the mere difference between the claimed invention and the prior art is some range, variable or other dimensional limitation within the claims, patentability cannot be found.

It furthermore has been held in such a situation, the Applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range. *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

Response to Arguments

Applicants' arguments filed August 4, 2003 (Paper No. 5) have been fully considered but they are not persuasive.

The Applicants contend that the claims merit a patentable invention since Applicants allege that Hagiwara (JP 1-315085 A) does not appear to disclose wherein the transparent window is attachable and detachable.

As set forth in the rejection, supra, the Examiner maintains that assuming that the transparent window (4) of Hagiwara (JP 1-315085 A) is unattachable to and undetachable from the case (1a, 1b), Official notice is taken that making transparent members or windows which allow light to be transmissive therethrough, as being "attachable" and "detachable" relative to their support, is a concept that is notoriously old and well known in the art. Examples include, *inter alia*, replacement windows for motor vehicles, eyewear, homes, etc. Moreover, the Examiner notes that an English-translated copy of a previously cited document (JP 62-267985) discloses a disk cartridge having an attachable and detachable window.

Given the teachings of Hagiwara (JP 1-315085 A) as applying a light transmissive window to a head access opening of a disk cartridge to prevent infiltration of dust/debris into the cartridge, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the window (4) of Hagiwara (JP 1-315085 A) as being "attachable" and "detachable" as is ***conventionally*** done with light transmissive windows (***even within the disk cartridge art***) in order to replace a damaged, scratched, broken window (4) of Hagiwara (JP 1-315085 A) without having to completely throw away the entire disk cartridge, including any valuable information stored on the disc residing therein. Such concepts of replacement windows are ***well known, established and appreciated in the art.***

It is noted that the Applicants have not seasonably challenged the Examiner's position regarding the use of Official notice as taken in the previous Office action (Paper No. 4) by requesting "a demand for evidence."

As has been established in patent practice, as articulated in the MPEP § 2144.03:

> If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239 (CCPA 1943). A seasonable challenge constitutes a demand for evidence made as soon as practicable during prosecution. Thus, applicant is charged with rebutting the well known statement in the next reply after the Office action in which the well known statement was made. This is necessary because the examiner must be given the opportunity to provide evidence in the next Office action or explain why no evidence is required. If the examiner adds a reference to the rejection in the next action after applicant's rebuttal, the newly cited reference, if it is added merely as evidence of the prior well known statement, does not result in a new issue and thus the action can potentially be made final. If no amendments are made to the claims, the examiner must not rely on any other teachings in the reference if the rejection is made final.

Since the Applicants did not seasonably traverse the well known statement during examination, the object of the well known statement has been taken to be admitted prior art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (703) 305-3452. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone numbers for the

organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

William J. Klimowicz
Primary Examiner
Art Unit 2652

WJK
September 12, 2003